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AUTHOR Vincent, Trudy
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ABSTRACT

The idea of diverting youths away from the juvenile justice system has grown in the past decade. Most evaluations of diversion programs have been program-centered rather than examining individual programs, and in most cases, success has been judged by recidivism rates. A diversion program, called the Careers Center, was investigated and a combination of individual and environmental variables was generated to predict the success of 64 clients, ages 15-18. Significant predictors of success were: (1) a lower number of recorded legal changes; (2) high IQ; (3) no history of serious behavior problems; (4) no previous institutionalization; (5) early entry into the program; and (6) a possible learning disability. The results provide further evidence that youths who have been more involved in the juvenile justice system may be more difficult to rehabilitate. (Author/JAC)

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PREDICTING SUCCESS OR FAILURE IN A JUVENILE DIVERSION PROGRAM

Trudy Vincent

University of Maryland

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INTRODUCTION

The idea of diverting youths away from the juvenile justice system is not a recently devised strategy, though the sudden explosion of "diversion" programs over the past ten years might lead one to believe otherwise. Before the development of formal diversion programs, and in those areas where projects of this sort do not currently exist, the widely accepted figure is that approximately half of all police juvenile contacts are settled without court referral. Of those cases received at court, about 50% are eliminated through informal probation, referral to other agencies, dismissal at intake, and similar procedures. It is relevant here to examine the circumstances and events which led to the transition of diversion from an informal process to a federally mandated priority.

On one level, there was concern expressed with regard to the informality and non-standardization of the existing preadjudication diversion practices. An NIMH report entitled "Diversion from the Criminal Justice System" (1971) stated that "the criteria for selection of disposition generally are not explicitly defined, ordered in priority, or systematically reviewed for administrative purposes." Several studies found that disposition of juveniles was as much a function of characteristics of the particular juvenile (i.e., sex, race, attitude, age) and of the police as it was a function of the offense committed. Findings such as these which questioned the efficiency and effectiveness of existing diversion practices pointed to the need for a formalization of diversion procedures.

On a broader cultural level, there was a growing dissatisfaction with the juvenile justice system as a whole. In 1967, the Supreme Court assessed the juvenile court system in rendering the Gault decision. Their findings, as summarized by Lemert (1971), were that the wide powers of the juvenile court had not appreciably diminished youthful crime; that inconsistencies in its philosophy can have adverse effects on youth under its control; and that gross injustices may result from its procedures in which youth are punished more severely than adults for comparable offenses.

That same year, 1967, the major impetus in the movement to establish formal diversion programs was provided by a report of the President's Commission on Law Enforcement and the Administration of Justice (1967). This call to action stated that "The formal sanctioning system and pronouncement of delinquency should be used only as a last resort. In place of the formal system, dispositional alternatives to adjudication must be developed for dealing with juveniles, including agencies to provide and coordinate services and procedures to achieve necessary control without unnecessary stigma. Alternatives already available, such as those related to court intake, should be more fully exploited." From these accumulated reports came the more recent formal emphasis on diversion programs in juvenile justice. A brief review of published research in this area will clarify its current status and show how the present study adds both substance and a different perspective on evaluation of these programs.

In reviewing the existing literature dealing with the evaluation of juvenile diversion programs, there are several characteristics

of these evaluations which emerge consistently. The first is that these evaluations are program-centered rather than looking at individual differences within programs. That is, most evaluations compare overall success rates of the program group with some kind of control group, without looking at the characteristics of individuals which contribute to the success rate of the program. In the same vein, there are few reported attempts to assess the program environment to explore what particular characteristics of the program contribute to either success or failure of both the individual and the overall program. Without information about the characteristics of the individuals in the program, the program, and their interaction there is no way of knowing what factors contributed to the success or failure of the program.

It is also important to note that even if an experimental program is not judged to be successful by comparison to some other standard such as a control group or arbitrary cut-off point, there will be some subjects who do succeed. If all that is being examined is the overall success rate, then the factors which contributed to the success of the smaller number of subjects will be lost, and the positive characteristics of both subjects and program will not be acknowledged.

The definition of "success" in these diversion programs is also consistent throughout the literature. In most cases, success is determined by the rate of recidivism -- that is, the percentage of subjects rearrested while in the program or during a follow-up period. It is assumed that this is the superordinate goal of these programs, but it is also a rather limited notion of success,

which may not be clearly linked to the qualities of the program or to immediate program goals, such as linkage to services, or education and/or vocational training. Thus, success in a program may mean much more than simply whether the subject is rearrested. It can also mean that the subject has benefitted in any number of ways from being in a particular program.

The purpose of the present study is to examine possible factors which predict whether an individual will be successful in the juvenile diversion program being considered here (The Careers Center). This study represents a unique contribution to the field of diversion research in several ways because of the differences between this program and other diversion programs as reported in the literature. One contribution is that this program differs from most other diversion programs reported in both form and content. Though many of the programs (such as the Youth Service Bureau) do refer juveniles for educational or vocational training (among other services), this is strictly liaison work rather than an actual provision of services. For the most part, this category of program uses recidivism rate as the sole criterion for success, rather than whether clients participated successfully in community services. Other categories of programs, such as group homes, differential treatment programs, and youth advocacy programs, also reported recidivism rates as their only criterion for success. The Careers Center seems to be one of a very few diversion programs which actually provide educational and vocational training on site, in a non-residential setting, and one of a few programs which report that a participant can be terminated for reasons other than those relating to rearrest. Success for each subject in the

Careers Center program is more closely linked to program goals, for a subject must complete each phase of the program, both academic and vocational, to be considered a success. Thus, success is more than simply not recidivating, and, concomitantly, subjects can fail for reasons other than rearrest (e.g. truancy, drug abuse).

Another contribution is the use of a "within-program" evaluation approach to look at whether certain individuals are faring better than others in the program, based on an examination of both individual and environmental factors. In this way, the factors which contribute to the programs overall success rate can be examined, rather than lost in a global measure of program success. Thus, an understanding of how this program affects juveniles will both add another dimension to the kind of program being reported, and even more importantly it may encourage programs to use more than recidivism rate as an outcome variable when evaluating juvenile diversion programs to examine the interaction of individual and environmental characteristics which influence the overall success rate.

Only one program evaluation (Quay & Love, 1977) has been encountered in which the program is both similar to the Careers Center in structure, and also attempts to examine predictors of success or failure. Because this program was the most similar to the Careers Center program that was encountered it will be described in some detail. The program provided services in three major areas: vocational counseling, training and job placement, academic education, and personal and social counseling. The clients were 436 youths aged 12-16 who were either: legally adjudicated as

delinquent; designated as being in need of supervision; or informally referred but not in formal contact with the court system. The clients were compared to an equivalent control group of 132 cases who were treated by whatever other means were available to the juvenile justice system.

The overall evaluation found that the experimental group incurred significantly fewer rearrests. More relevant to the present study are the findings with regard to the prediction of success and failure as defined by in-program plus post-program rearrests. Unfortunately, there were a number of problems with this study that complicate its usefulness, such as a lack of clarity in describing the conditions of the control group. Also, although this program seemed to define success as something other than rearrest, it was never made clear what the criterion was, and in predicting success, rearrest was the only criterion used. In addition, the presentation of findings is not clear, but it does seem to suggest the following: The investigators found that weighted combinations of certain variables could be used to predict success and failure. The relevant variables were: age, sex, prior status offenses, prior property offenses, and a math pretest score.

The dearth of studies which look at predictors of individual success or failure in diversion programs necessitated going outside of the diversion literature to other areas of juvenile justice research where the relationship of individual factors to program success has been explicitly investigated. The most common area of study are parole or probation prediction studies - that is, factors which predict which subjects are most likely to either violate

probation or parole or to recidivate are examined. There were some limitations to using these studies to generalize to the prediction of individual success in diversion programs, however. One limitation was that the subjects of these studies were not usually from a particular program or population, but rather had been released from institutions or courts during a particular time period. There was little, if any, description of these populations (other than age) or programs, so little information on these factors could be gained. Also, once again the sole criterion for failure was either readivism or parole or probation violation. With these cautions in mind, what follows is a review of some of these studies. Only those predictor variables relevant to the present study will be examined.

The first study, by Gough, Wenk, and Rozynko (1965) attempted to predict success or failure on parole for 739 California Youth Authority wards. This study is frequently cited for its early use of a "Base Expectancy" index. This index weights variables in several different categories and yields a total score for each individual which is then used to predict parole success or failure. In this particular table, the categories of variables were: type of offense (crimes against person or crimes against property), age at first admission, and previous record. The Base Expectancy index was found to be a better predictor of parole success than either the MMPI or the CPI. It appeared that the earlier a boy's first commitment, the more extensive his prior record of delinquency, and the involvement of a property offense in his commitment predicts less of a chance for success on parole.

Smith and Lanyon (1968) attempted to predict probation violation or nonviolation in male juvenile delinquents who had been assigned to probationary status directly from juvenile court and had no prior institutionalization. The investigators used three predictors. The first was a base expectancy table, which yielded a total score based on five differentially weighted variables: total number of court referrals; present type of offense; age; school status; and age at first court appearance. The other two predictors were clinical and actuarial MMPI predictions. The base expectancy table score yielded predictions slightly better than chance, while predictions from MMPI profiles were at chance level.

Another investigation (Ganzer & Sarason, 1973) attempted to isolate variables which would discriminate between recidivists and nonrecidivists in a sample of formerly institutionalized male and female juvenile delinquents. Findings were that recidivists were younger at first record of anti-social behavior and were institutionalized at a younger age, and had lower estimated verbal intelligence scores. The type of offense committed did not differentiate between recidivists and non-recidivists.

Alumbaugh, Crigler and Dightman (1978) found that the more reliable predictors of recidivism of juveniles (from a discriminant function) were in order: number of days in the system (not defined); number of commitments, and sex (though it was not specified which sex was more likely to recidivate).

A parole prediction study by the Illinois Department of Corrections (Baird, 1973) found that age at commitment was the single best predictor of parole success, while fewer previous offenses

and good results on the Stanford Achievement Test were positively related to parole success.

Finally, Elder and Cohen (1978) attempted to predict work release success from a minimum security prison for delinquent youth without violent backgrounds. The best predictors of success were whether the inmate had been convicted of auto theft, history of drug use, and age at first arrest. Unfortunately, it was not clear whether these predictors were positively or negatively related to success.

Given these empirical findings, and the writings of the theoretical diversion literature, it can be hypothesized that certain variables are likely to predict success or failure in the Careers Center program. The predictive factors most frequently encountered in the literature seem to fall into two categories--age-related variables and delinquent record, (There is a fair amount of overlap between these two categories). The most frequently mentioned predictor in the literature was age as related to delinquent history (i.e., age at first arrest, first commitment, first court appearance, or first known antisocial act). The other age-related variable was simply chronological age.

The second category includes such factors as number and type of previous known offenses, type of offense for which the subject was most recently arrested, and amount of time spent in the juvenile justice system. This category also relates to the premise which underlies the entire concept of juvenile diversion: That the more extensive a juvenile's contact with the justice system, the more adverse consequences this will have for his or her behavior.

The frequency with which these variables occur in both the empirical and theoretical literature leads to the expectation that variables which fall in these two categories will be most likely to predict success or failure in the program. In addition, it makes intuitive sense to assume that the more involved an individual is in a particular pattern of behavior or lifestyle, and the earlier in life that involvement occurs, the more difficult it is to change that pattern. For this reason, it is hypothesized that the more extensive the subject's delinquent involvement, and the earlier its genesis, the less likely the subject will be to succeed in the program.

Another frequently mentioned finding is that those subjects who do better on measures of intellectual achievement are predicted to be more likely to succeed. This category is particularly relevant to the Careers Center program, because the initial component of the program consists entirely of academic activities. Given this information and the prediction findings, it can be hypothesized that those subjects who have the lowest indicators of intellectual achievement (IQ, Iowa Scores) will have the most difficulty succeeding in the Careers Center program, and that these variables will predict significantly to program success.

Two other categories of predictor variables being considered in this study, demographics and problems not directly related to delinquent history such as diagnosed learning disability, diagnosed behavior problems such as depression or hyperactivity, or history of severe drug abuse, appear only episodically in the literature. However, because these variables are mentioned occasionally, and

because most of them seem at the very least face valid, they have been included in this analysis for exploratory purposes.

Thus, the purpose of this study is to examine all of these variables to determine which of them best predicts which subjects will succeed in the program, and which subjects will fail.

Finally it should be noted that nowhere in the literature was the impact of program environment on individual success or failure considered. However, evidence provided by interim evaluations of the Careers Center program indicated that the program environment seemed to be undergoing some significant changes. For this reason, and given the importance of considering person environment interaction in an evaluation such as this, a variable which assessed at what point in the program's evolution the subject entered was included for exploratory purposes.

METHODS

Setting

The Careers Center is a non-residential facility serving 15-18 year old adolescents who generally have had more than one adjudicated offense and are referred to the Center for treatment on a non-voluntary basis by order of the Court. The goals and objectives of the Center are: to provide intensive remedial education to upgrade juveniles to at least a fifth grade reading and math level before discharge, to provide career education and vocational experiences for juveniles and to refer them to potential employers with the goal of full-time, permanent employment at the time of discharge with follow-up to determine if they maintain successful employment at least a year (Francis, Note 1). To meet

these goals, the Center program consists of a period of basic academic skills and vocational education, followed by a period in which the juvenile is working part-time and pursuing the academic program part-time. Finally, the student is placed in a full-time job and followed up by the staff while he/she is on that job.

The general atmosphere of the Center was that of a more tightly controlled environment than a public school, which is understandable given its function as an arm of the court, however far removed. Students carried daily behavior check lists to all their classes, and behavior was generally very closely monitored. There was also evidence to indicate that the extent to which strict rules were emphasized in the classroom was higher than in public schools. This is based on the administration at two points in time of the Classroom Environment Scale (CES) (see Trickett and Moos, 1973). The CES is a set of student answered scales which assess the emphasis placed on nine dimensions of the classroom environment. The first administration found that, relative to public school classroom, classes at the Careers Center were, at that time, roughly equivalent on several dimensions, including Involvement in the class, affiliation among students, Teacher Support, Order and Organization, and Innovation. They were somewhat higher than public school classrooms in the emphasis placed on Competition, and considerably higher in the areas of Task Orientation, Rule Clarity, and Teacher Control.

A profile given approximately 6 months later shows that the average class at that time, as measured by the selection procedure mentioned above, was approximately equal to public school classrooms

in the area of Teacher Control. The classes are somewhat lower than the average public school classroom in Affiliation among students, Involvement, Teacher Support, and Innovation and Competition. This also indicates that there were a number of changes occurring in the school environment in the course of the program.

Subjects

The subjects of this study are 64 adolescents between the ages of 15 and 18 who have at some point attended the Careers Center since its inception in July, 1978. The basic profile of youths admitted to the Careers Center is that he/she: resides in Anne Arundel county; is under the jurisdiction of the Juvenile Court there; has been adjudicated delinquent on at least one occasion; is ordinarily out of work and out of school; is of average learning potential; and is referred to the Careers Center by the Juvenile Services Administration.

The demographics of this sample are as follows: Of the 64 subjects, 43 graduated from the program, and 21 were terminated. Seven of these subjects were female, and 16 of 64 were black, with the rest being white. The mean age at admission to the Careers Center was 16 years, 3 months, and the mean age at first arrest was 14 years, 10 months. Thirty eight of the 64 subjects had been in a correctional institution of some sort previously.

With regard to intellectual achievement, the mean IQ was 88, the mean Iowa Reading score was approximately at the 6.0 grade level, and the mean Iowa Math score was at the 6.2 grade level.

The personal history variables broke down as follows: Twenty subjects had a recorded history of severe behavior problems, 17 a

history of severe or chronic drug abuse, and 15 had a recorded possibility of being learning disabled.

Procedure

Archival data were gathered from the subjects' files at the Careers Center and the Center's quarterly reports. The basic data collected for this study consist of test reports, intake data forms, and intake interviews found in the files at the Careers Center.

Predictor Variables

The predictor variables can be grouped onto four basic categories. The first is demographics, which consists of the variables age at admission to the Careers Center, sex and race. The second category is comprised of those variables related to the subject's delinquent history: age at first arrest, amount of time between first arrest and admission to the Careers Center, whether the subject has been institutionalized, number of previous arrests, and the charge for which the subject was referred to the Careers Center. The third category deals with variables which related to academic achievement: Wechsler IQ scores, Iowa math and Iowa reading scores. The final category encompasses severe problems in the subject's recent history which might in some degree affect his/her performance at the Careers Center: mention in the file of a learning disability; diagnosed behavior problems such as depression or hyperactivity; and severe alcohol or drug abuse.

Outcome variable. The criteria for terming students "graduated" or successful as established by the Careers Center was if the student achieves one or more of the following goals:

1. Had successfully taken and passed the General Equivalency Degree (GED) exam.
2. Had been successfully returned to public school.
3. Had been accepted into technical school.
4. Had been accepted in the Vocational Rehabilitation program.
5. Had completed all phases of the program or is attending college.

For the purposes of this study, those subjects who are considered as having "graduated" from the program are grouped in the success category. Those subjects who have been terminated from the program for various reasons (i.e., alcohol or drug abuse, truancy, rearrest) constitute the failure group.

RESULTS

The main purpose of this study was to predict success or failure (i.e. whether the subject graduated or was terminated) in this particular diversion program based on the subject's scores on one or more of the previously cited predictor (independent) variables. To this end, a stepwise multiple regression method was the main analytic technique employed. This technique provided information on the variable that at each step made the greatest increment to R^2 (or the total proportion of variance in the dependent variable (success/failure) accounted for). To gain additional information with regard to the number of cases which would have been correctly classified, and also to provide a check on the stepwise results, a discriminant analysis was also performed.

The multiple R of .530 for the prediction equation was significant ($p \leq .05$) up to and including the sixth step; that is, up to this point the amount of variance in the dependent variable

could be significantly explained by the six predictor variables. The order of entry for the variables was as follows: the number of charges (NO. OF CHARGES) in the subject's record was the strongest predictor (9.8% of the variance accounted for), the subject's IQ score accounted for 6.0% of the variance; next entered was whether the subject had a history of severe behavior problems (BP) -5.0% of the variance; whether the subject had been institutionalized previously in a correctional facility (3.3% of the variance); when in the course of the program the subject had entered it (ID) accounted for 1.8% of the variance; and the last variable was whether a learning disability had been suspected in the subject's past (2.0% of the variance). These results are summarized in Table 1.

With regard to directionality, the relationships between the predictors and the dependent variable were for the most part as expected. Subjects with the least number of charges were predicted as most likely to be successful, as were subjects with higher IQ's. Subjects with no history of severe behavior problems and who had not been institutionalized were also predicted to be successful. Subjects who entered the program when it was just developed were predicted to be more successful than those who entered the program later. The one finding which was not in the expected direction was that subjects who were suspected of having some sort of learning disability were more successful in the program.

A discriminant function analysis was also performed to reinforce the findings of the stepwise regression. This analysis yields the same sort of prediction equation as the stepwise regression,

but has the additional advantage of maximally discriminating the members of the sample to yield information as to which category each subject falls in. This means that this method will tell which individual's predictions were correct or incorrect.[1]

The order of entry of variables into the discriminant analysis were as follows: number of charges, behavior problems, IQ, Iowa Math Score (MATH), learning disability, ID number, institutionalization, and age at admission to the program (AGEAD). All but INST and AGEAD entered with a significant F. This can be compared to the stepwise regression results, where the order of entry, it will be recalled, was: NO OF CHARGES, IQ, BP, INST, ID, and LD. The only variable significantly different in the discriminant equation was the MATH variable. In addition, 72% of the successful cases were correctly classified, and 81% of the unsuccessful cases were correctly classified.

DISCUSSION

The results of the data analysis confirm the hypotheses set forth in the earlier section. Based on the prediction literature and the theoretical diversion literature, the initial hypothesis was that the more extensive the subject's previous delinquent involvement, the less likely the subject will be to succeed in the program. It can be recalled that the basic assumption leading to

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[1]Because missing data could not be treated in the same manner in these two analyses, the findings of the stepwise regression were not exactly duplicated. However, given that any cases with missing data were thrown completely out of the discriminant analysis, the similarity of the two findings indicates that the congruent results were most robust. In addition, the similarity of findings in both mean scores and the prediction equation indicates that missing data were distributed randomly.

the idea of diversion was that involvement in the juvenile justice system had negative consequences. Thus, the confirmation of this hypothesis provides empirical verification of the policy initiative for the development of diversion programs. This hypothesis was confirmed by the finding that the most variance in the regression equation was accounted for by the number of charges which the subject had recorded against him or her.[2]

While number of charges is the most accurate means of measuring the number of contacts with the system, the real extent of the contacts is also an important issue to consider. The variable in this analysis which best addresses this greater depth of contact is whether or not the subject has spent time in a correctional institution. This implies not only that the subject has gone through the entire judicial process at least once, but also that in most cases the subject must have had a relatively extensive amount of contact with the system previous to his or her institutionalization, because "inexperienced" subjects are not ordinarily institutionalized. Thus, another confirmation of the hypothesis regarding contact with the system is the contribution of the institutionalization variable to the significant prediction equation.

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[2]This variable reflects contact with the juvenile justice system more accurately than the other variables in this category, because it indicates the number of times the youth in some way had contact with the system. Another variable in this category, the amount of time between the subject's first arrest and admission to the Careers Center, may be misleading, because the subject may have been initially arrected at a young age, but not rearrested until the charge for which he or she was sent to the Careers Center. The same is true for the age at first arrest variable, another variable in the delinquent involvement category.

Two of the other three variables that entered into the significant equation were in the category of problems not directly related to delinquency-behavior problems and suspected learning disability. These findings are complicated to interpret given the nature of this data. For one thing, the diagnosis of learning disability and various behavior problems, such as hyperactivity, is a very complex issue. In addition, as there were no standardized forms, subjects were considered to fall in the behavior problem category if there was mention of a specific problem (e.g. chronic depression) anywhere in the files, such as the psychological report or past history. The same was true of the learning disability categorization. The limitation of this approach is that even if there was no mention of the problem in the file, this does not completely rule out the possibility that there has been or is currently a problem, nor does mention mean there is definitely a problem.

In light of the somewhat speculative nature of this data the results can now be examined more closely. The finding that subjects with a history of behavior problems do not do as well in the sort of environment that attempts to maintain a tightly controlled discipline is a logical one. Though in the spirit of a diversion program the Careers Center seems to downplay it's punitive role, the fact is that students are there because they have violated laws. This seems to translate into the philosophy that guidelines for behavior and discipline must be more stringent than in a regular academic environment in order to reinforce for students the need to conform to rules. This is confirmed by evidence which shows

that on relevant dimensions of the Classroom Environment Scale (CES) (see Trickett and Moos, 1973 for further details), the Center was considerably higher on the dimensions which assessed the emphasis on strict rules, and the degree to which rules governing classroom behavior are explicit and understood. Students with severe behavior problems may find these strictures too confining, and thus would have more difficulty obeying the guidelines of the program. Indeed, students with severe behavior problems would no doubt have difficulty conforming to any sort of structured program without a great deal of supportive counseling as an adjunct.

The finding with regard to learning disability is less easily explained. It was found that if a possible learning disability was mentioned, the subject was more likely to do well in the program. This is a rather paradoxical finding, particularly since a higher IQ is a good predictor of success in the program and also because a lower IQ is significantly correlated ($r = .51$) with learning disability in this study. Though this finding seems counterintuitive, an attempt will be made to explore possible explanations.

Initially it should be recalled that the criterion for admission to the Careers Center was that the subject have average learning potential. Thus, severe learning disabilities had been screened at this level, implying that subjects who at some point were diagnosed as learning disabled were in fact simply having serious academic difficulties. It is probable that the more structured academic environment and greater individual attention which the subject received at the Careers Center was much different

from his or her experience in public school, and more suited to allowing the subject to overcome or better deal with academic difficulties. Given this more positive experience with academia, these subjects may have gained more motivation to succeed in the program.

Another possibility that cannot be ruled out, however, is that this result was a chance phenomenon. Learning disability was not at all correlated with the dependent variable, and no suppressor variable influenced this outcome. Given these statistics, the nature of the data, and the fact that learning disability only accounted for less than 2% of the variance, caution should be exercised in drawing too many implications from this finding.

The other variable found to enter into the significant equation was one about which no hypotheses had been formulated. This variable was the subject's ID number, which represented the time at which the subject entered the program (i.e., the first subject to be admitted to the program would be ID number 1, and each subject entering the program after that would be numbered consecutively.) This may suggest that the environment of the program changed over time.

The Careers Center program has in fact gone through some major administrative changes since its inception in July 1978, and so it was decided to include the ID variable as a way of exploring whether these changes might have had some effect on the success rate of the program. This did indeed seem to be the case, for subjects who had a lower ID number (i.e. entered the program

earlier) were predicted to be more likely to succeed than those subjects who entered later. This significant finding also heightens the importance of viewing programs as dynamic entities which have the potential to play as important a role in influencing individual outcome as the characteristics of the individual.

One of the effects of the change in administration from non-profit foundation to the county government was a long period of uncertainty about job security on the part of the staff and a consequent period of lowered morale and disorganization and a number of staffing changes. All of these factors may well have combined to produce a greatly varied environment through the course of the program.

Additional evidence from another source (Trickett & Watts, Note 2) supports this study's findings that changes in the program's environment may have contributed to a lowered success rate as the program progressed. As part of a program evaluation, the Classroom Environment Scale (CES) (see Trickett & Moos, 1973) was administered in June of 1979 and then again four months later. On the three scales which assess the level of involvement and support among students and between students and the teacher, there was a decrease from June to October. In addition, there was a decrease in the scale which assesses the degree to which classroom material is well organized and "under control", and a decrease in the degree to which roles governing classroom behavior are explicit and understood.

The CES findings and the reported stresses in the environment seem to indicate that in the period beginning in the fall of 1979

there were some major changes occurring in the environment of the program. What the direct causal relationship is between these changes and a fewer number of subjects graduating is difficult to say, but the CES provides some insight into possible explanations. If teacher discontent was being communicated to students, whether directly or through a more tense, uncertain environment, the atmosphere was most probably a more stressful one. Given that these youths were for the most part not academically inclined initially, an environment which provided even more stress would not be conducive to motivating the subjects to remain in the program.

It is possible also that some external factors were affecting the program, such as a change in the kind of youths being referred to the program by the court. However, the strong environmental effects that were acting on the program seem to provide the most plausible explanation for the finding that youths who entered the program earlier were predicted to be more likely to succeed.

Thus, except for the finding with regard to learning disability, the results of this study uphold the hypotheses initially proposed. To a great extent, these hypotheses were based on findings from the prediction literature and theoretical diversion literature. The contribution of the present study to the prediction field is that it replicated the major findings from several different prediction studies in one study. The contribution of this study to the diversion literature is that it provides further empirical evidence that youths who have been more involved in the juvenile justice system are more difficult to rehabilitate. Most Importantly, there has been little written about "within program"

evaluations of this sort, so that the present study makes a unique contribution not only in its findings, but in emphasizing the need to examine "within-program" factors as well as overall recidivism rates.

Examining specific factors contributing to an individual's success or failure in a particular program not only allows the consideration of whether an individual will survive in the program. It also implies that the program has acknowledged that not everyone has the same needs, and ensures that the ways in which the unique needs of the individual are being met will not be lost in the overall evaluation picture.

The concern with both person and environmental variables carries additional implications for how results of evaluations are interpreted. Thus, an emphasis on the role of both the person and the environment in influencing program outcome serves to sensitize program planners that the "blame" for any individual's failure should not be placed solely on the characteristics of that individual. Hopefully, this will also increase the chances that a "within-program" approach such as the one advocated here will not be used to screen out "high risk" individuals. Rather, calling attention to their special needs means programs can be designed in the future which not only address these individual needs specifically, but also attend to the environmental factors which will optimize the chances of these youths succeeding in the program.

Finally, the most important issue addressed by this study is the need to examine not simply the effect of program characteristics on outcome, but also the role of the environment, individual

differences, and the interaction of all three of these factors. Too much information is lost if program structure is all that is being evaluated. In addition, the generalizability of findings from a between program or control group evaluation is conceptualized much differently from a "within-program" evaluation. If program structure is all that is reported, even if it is found that results are generalizable, it is hard to say of what that is a function. It is harder to generalize from a "within-program" evaluation, because findings are limited by the specificity of examining persons, environment and program. However, as more studies are reported in this manner, and empirical findings on more of these dimensions accumulate, a broader base of knowledge will develop with regard to the ecological validity of various programs and program components, and will be available to program developers. In the long run, the task of replicating successful programs will not only be made simpler, but also more far reaching by careful consideration of not only program characteristics, but the contribution of environmental and individual differences to a successful outcome.

Table 1

Summary of Stepwise Regression

Variable Name	Multiple R	Proportion of Variance
Number of Charges	.313	9.8%
IQ	.398	6.0%
Behavior Problems	.457	5.0%
Institutionalization	.492	3.3%
ID Number	.510	1.8%
Learning Disability	.530	2.0%
Charge at Admission	.542	1.4%
Sex	.550	.8%
Race	.552	.2%
Reading Score	.553	.2%
Time in System	.554	.1%
Age at First Arrest	.557	.1%
Age at Admission	.557	.3%
Drug Abuse	.558	.0%

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